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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/874,563	06/05/2001	John Atcheson	REALNET.054C1C1	6917	
25943	7590 05/23/2005	EXAMINER		INER	
	WILLIAMSON & WYA	HAYES, JOHN W			
PACWEST CENTER, SUITES 1600-1900 1211 SW FIFTH AVENUE			ART UNIT	PAPER NUMBER	
PORTLAND,			3621		
			DATE MAILED: 05/23/200:	DATE MAILED: 05/23/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)								
		09/874,563	ATCHESON ET AL.								
Office Acti	ion summary	Examiner	Art Unit								
	ATR 641	John W Hayes	3621								
The MAILING D Period for Reply	ATE of this communication app	ears on the cover sheet with the c	orrespondence address								
THE MAILING DATE ( - Extensions of time may be avafter SIX (6) MONTHS from the period for reply specifie of the period for reply is specifient of the period for reply is specifient of the period for reply is specifient.	OF THIS COMMUNICATION. vailable under the provisions of 37 CFR 1.13 the mailing date of this communication. It is above is less than thirty (30) days, a reply iffied above, the maximum statutory period we or extended period for reply will, by statute, fice later than three months after the mailing	IS SET TO EXPIRE 3 MONTH( 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE date of this communication, even if timely filed.	nely filed  rs will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).								
Status											
1)⊠ Responsive to c	ommunication(s) filed on 24 Ja	nuary 2005.									
2a)⊠ This action is FII	· · · —	action is non-final.	,								
3) Since this application is in condition for allowance except for formal matters, prosecution as to the me											
closed in accord	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.										
Disposition of Claims											
4)⊠ Claim(s) 1-7,9-1	)⊠ Claim(s) <u>1-7,9-18,20,25-28,30,36-38 and 42-44</u> is/are pending in the application.										
	4a) Of the above claim(s) is/are withdrawn from consideration.										
5)⊠ Claim(s) <u>11-14 and 38</u> is/are allowed. 6)⊠ Claim(s) <u>1-7,9,10,15-18,20,25-28,30,36,37 and 42-44</u> is/are rejected. 7)□ Claim(s) is/are objected to.											
					8) Claim(s)	8) Claim(s) are subject to restriction and/or election requirement.					
					Application Papers						
9)☐ The specification	is objected to by the Examiner	•									
	0)⊠ The drawing(s) filed on <u>05 June 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.										
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).										
Replacement drav	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).										
11) The oath or decla	aration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.								
Priority under 35 U.S.C. §	§ 119										
a)∐ All b)∐ Som	ne * c)⊡ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).								
	1. Certified copies of the priority documents have been received.										
	2. Certified copies of the priority documents have been received in Application No										
		ty documents have been receive	d in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.											
ood the attached t	detailed office action for a list (	or the certified copies flot receive	u.								
Attachment/c\											
Attachment(s)  1)  Notice of References Cited	I (PTO-892)	4) Interview Summary	(PTO 412)								
2) 🔲 Notice of Draftsperson's Pa	atent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite								
3) Information Disclosure State Paper No(s)/Mail Date	tement(s) (PTO-1449 or PTO/SB/08)	5)  Notice of Informal Pa	atent Application (PTO-152)								

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#### **DETAILED ACTION**

#### Status of Claims

1. Claims 39-41 have been canceled in the amendment filed 24 January 2005. Claims 8, 19, 21-24, 29 and 31-35 have been previously canceled. Thus, claims 1-7, 9-18, 20, 25-28, 30 and 36-38 and 42-44 remain pending and are presented for examination.

## Response to Arguments

- 2. Applicant's arguments filed 24 January 2005 have been fully considered but they are not persuasive.
- Applicant argues that the reference to Nordgren is not an enabling reference since it is not clear how the recommendations are generated. Examiner respectfully disagrees and submits that the reference to Nordgren appears to be enabling for at least the limitations of the claims. With respect to claim 1, examiner submits that the limitation "receiving signals from the first input device that indicate at least one of a plurality of user preferences" is equivalent to the user picking at least one favorite movie as disclosed in Nordgren. The limitation "comparing at least a subset of the user preferences against the plurality of datafiles in the database to identify matching datafiles, each matching datafile containing preferences matching at least a threshold number of the indicated user preferences" is equivalent to finding other persons who liked the same movie as disclosed by Nordgren. Examiner also notes that the "threshold number" may simply be one favorite movie, for example. The limitation "selecting preferences from the identified datafiles, wherein the selected preferences do not match the user preferences" is equivalent to selecting other movies that other viewers liked, but not the user's favorite as disclosed by Nordgren. Examiner also submits that the teachings of Nordgren, such as searching a database to find records of users having similar movie selections are enabling to one having ordinary skill in the database art and examiner submits that Nordgren provides enough detail to enable one having ordinary skill in the art to build the system at least in accordance with the claim limitations.
- 4. Applicant further argues that the examiner could not perform the required difference determination and proper obviousness analysis required by law. Examiner respectfully disagrees in light of the

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discussion above related to the claim limitations and how the reference to Nordgren has been interpreted by the examiner in relation to these limitations.

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- As per Claims 9-10, applicant argues that Nordgren fails to disclose the dual determining operations as recited in the claim. Examiner respectfully disagrees and notes that the purpose of the product disclosed by Nordgren is to recommend a list of movies that might be enjoyable to the user, but unmatched from the original list of favorites that were selected by the user (In other words, movies that the user has not viewed) based on similar tastes of other users. The user in Nordgren inputs a plurality of user preferences (list of favorite movies) and this is compared with other users having similar tastes such as, for example, the same movie favorites. Thus, one having ordinary skill in the art can see that Nordgren provides recommended movie selections wherein the user preferences are unmatched.
- 6. As per Claims 15, 25 and 42, applicant argues that Nordgren fails to disclose identifying a (first) set of objects and then generating a combined set of objects from the identified (first) set of objects. Examiner respectfully disagrees and submits that Nordgren discloses identifying at least one set of objects having at least a threshold of similarities in common with the first set of objects such as searching a database and finding a list of other users that have the same favorite movies (set of objects), the threshold of similarities being the same movie titles. Nordgren further discloses generating a list of movies as recommendations (combined set of objects from the identified at least one set of objects).

### Terminal Disclaimer

7. The terminal disclaimer filed on 11 November 2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 5,583,763 has been reviewed and is accepted. The terminal disclaimer has been recorded.

# Claim Objections

8. Claims 39-41 depend upon claim 21 which has been canceled. For purposes of this Office Action, examiner assumes that claims 39-41 depend upon claim 14.

# Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 1-7, 9-10, 15-18, 20, 25-28, 30, 36-37 and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordgren, Layne "Taste Mate Video Selection System" [hereinafter referred to as Nordgren] in view of Hey, U.S. Patent No. 4,996,642.

As per <u>Claims 1 and 4-7</u>, Nordgren discloses a method for outputting recommended preferences to be executed on a computer system, wherein the computer system includes a processor, a database, a first input device and an output device, and wherein the database includes a plurality of datafiles each containing a plurality of predetermined preferences, the method comprising:

- accepting signals from the first input device to Indicate a plurality of user preferences (paragraphs 6 and 8);
- comparing at least a subset of the user preferences against the plurality of datafiles in the database to identify matching datafiles, each matching datafile containing preferences matching at least a threshold number of the indicated user preferences (paragraphs 6 and 8);
- selecting preferences from the identified datafiles, wherein the selected preferences do not match the user preferences (paragraphs 6 and 8); and
  - outputting, via the output device, the selected preferences (paragraphs 6 and 8).

Nordgren discloses comparing a users preferred or favorite movies with that of other users who have similar movie tastes (the threshold number of matches being the same favorite movies between different users) and provides a recommended list of movies to the user. Nordgren does not explicitly teach selecting preferences that do not match the user preferences, however this would have been

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obvious to one having ordinary skill in the art at the time of applicants invention in view of the teachings of Nordgren. The purpose of the product disclosed by Nordgren is to recommend a list of movies that might be enjoyable to the user, but unmatched from the original list of favorites that were selected by the user (In other words, movies that the user has not viewed) based on similar tastes of other users. The user in Nordgren inputs a plurality of user preferences (list of favorite movies) and this is compared with other users having similar tastes such as, for example, the same movie favorites. Thus, one having ordinary skill in the art can see that Nordgren provides recommended movie selections wherein the user preferences are unmatched.

Hey teaches a system and method for recommending items, including movies and music, to a selected user from a database of items sampled by other user and not the selected user. Hey further teaches that the system includes a keyboard input, display, processing means and a database that stores files indicating each user's sampled items and their rating for the sampled item. The database is searched to match the selected user's sampled items with those of the other users. After matching and additional processing, other users files are identified as "recommending users" due to the degree of agreement between the identified files and the selected user's file. From the recommending users' files Hey determines and ranks non-matching items and presents the list to the selected user. Hey also teaches that the system can receive input or provide output to a remote user. See the entire document of Hey.

Hey further teaches that in determining the "agreement scalar" that is used to identify the recommending users, the number of items sampled by both members is considered in the calculation of the agreement scalar. Hey also teaches that "it is evident that the greater the number of items that the users have sampled, the more accurate the agreement scalar should be for each of the users with which the selected user is paired". As Hey is obviously interested in providing accurate recommendations of items, as Hey teaches that low number of items sampled in common decreases accuracy, and as thresholding is a well known technique for eliminating conditions that do not warrant consideration, it would have been obvious to those of ordinary skill in the art to modify the teachings Nordgren to include well known thresholding as suggested by Hey in order to increase accuracy of recommendations and to save processing time on user files that would obviously yield unacceptable results. With regard to the

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number of items in the file and the threshold number, these limitations would have been an obvious matter of design optimization to those of ordinary skill in the art for the accuracy desired and the storage space available.

As per <u>Claims 2-3</u>, Nordgren further discloses identifying specific movies, but fails to explicitly disclose artists names. Hey discloses wherein the user profile includes rating information for items that the user has sampled and further discloses that the items are identified by title (Table 1). Hey, however, fails to explicitly disclose wherein the user profile indicates an artist's name. Examiner submits, however, that it is well known that an object such as a movie or song would be identified by either the title or the artists name and it would have been obvious to one having ordinary skill in the art to identify the object using any known identifier. This would provide the benefit of identifying an object by any number of identifiers known to the user.

As per <u>Claims 9-10 and 36-37</u>, Nordgren discloses a method for outputting recommended preferences to be executed on a computer system, wherein the computer system includes a processor, a database, a first input device and an output device, and wherein the database includes a plurality of datafiles each containing a plurality of predetermined preferences, the method comprising:

- storing a plurality of associated selections in a database (paragraphs 6 and 8);
- accepting signals from the first input device to Indicate a plurality of user preferred selections (paragraphs 6 and 8);
- determining that a number of the preferred selections match with the plurality of associated selections in the database (paragraphs 6 and 8);
- determining a number of unmatched associated selections in the database (paragraphs 6 and 8); and
  - outputting, via the output device, the unmatched associated selections (paragraphs 6 and 8).

Nordgren discloses comparing a users preferred or favorite movies with that of other users who have similar movie tastes (the threshold number of preferences being the same favorite movies between

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different users) and provides a recommended list of movies to the user. Nordgren does not explicitly teach determining a number of unmatched selections in the database, however this would have been obvious to one having ordinary skill in the art at the time of applicants invention in view of the teachings of Nordgren. The purpose of the product disclosed by Nordgren is to recommend a list of movies that might be enjoyable to the user, but unmatched from the original list of favorites that were selected by the user (In other words, movies that the user has not viewed) based on similar tastes of other users. The user in Nordgren inputs a plurality of user preferred selections (list of favorite movies) and this is compared with other users having similar tastes such as, for example, the same movie favorites. Thus, one having ordinary skill in the art can see that Nordgren provides recommended movie selections wherein the user preferred selections are unmatched.

Hey teaches a system and method for recommending items, including movies and music, to a selected user from a database of items sampled by other user and not the selected user. Hey further teaches that the system includes a keyboard input, display, processing means and a database that stores files indicating each user's sampled items and their rating for the sampled item. The database is searched to match the selected user's sampled items with those of the other users. After matching and additional processing, other users files are identified as "recommending users" due to the degree of agreement between the identified files and the selected user's file. From the recommending users' files Hey determines and ranks non-matching items and presents the list to the selected user. Hey also teaches that the system can receive input or provide output to a remote user. See the entire document of Hey.

Hey further teaches that in determining the "agreement scalar" that is used to identify the recommending users, the number of items sampled by both members is considered in the calculation of the agreement scalar. Hey also teaches that "it is evident that the greater the number of items that the users have sampled, the more accurate the agreement scalar should be for each of the users with which the selected user is paired". As Hey is obviously interested in providing accurate recommendations of items, as Hey teaches that low number of items sampled in common decreases accuracy, and as thresholding is a well known technique for eliminating conditions that do not warrant consideration, it would have been obvious to those of ordinary skill in the art to modify the teachings Nordgren to include

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well known thresholding as suggested by Hey in order to increase accuracy of recommendations and to save processing time on user files that would obviously yield unacceptable results.

As per <u>Claims 15-18, 20, 25-28, 30 and 42-44</u>, Nordgren discloses a multi-user computer system that provides user access to a database of objects, a method of recommending objects to a user, the method comprising;

- identifying on a remote computer, a first set of objects determined to be of interest to a first
  user; the first set of objects identified from a plurality of objects determined to be of interest to a
  community of users and represented by one or more data structures (paragraphs 6 and 8);
- using a processor to access the one or more data structures to identify at least one set of
   objects having at least a threshold of similarities in common with the first set of objects (paragraphs 6 and
   8);
- generating a combined set of objects from the identified at least one sets of objects (paragraphs 6 and 8); and
  - transmitting to the user computer the combined set of objects (paragraphs 6 and 8)

Nordgren discloses comparing a users preferred or favorite movies with that of other users who have similar movie tastes (the threshold of similarities in common being the same favorite movies between different users) and provides a recommended list of movies to the user.

Hey teaches a system and method for recommending items, including movies and music, to a selected user from a database of items sampled by other user and not the selected user. Hey further teaches that the system includes a keyboard input, display, processing means and a database that stores files indicating each user's sampled items and their rating for the sampled item. The database is searched to match the selected user's sampled items with those of the other users. After matching and additional processing, other users files are identified as "recommending users" due to the degree of agreement or similarity between the identified files and the selected user's file. From the recommending users' files Hey determines and ranks non-matching items and presents the list to the selected user. Hey also teaches that the system can receive input or provide output to a remote user. See the entire document of Hey.

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Hey further teaches that in determining the "agreement scalar" that is used to identify the recommending users, the number of items sampled by both members is considered in the calculation of the agreement scalar. Hey also teaches that "it is evident that the greater the number of items that the users have sampled, the more accurate the agreement scalar should be for each of the users with which the selected user is paired". As Hey is obviously interested in providing accurate recommendations of items, as Hey teaches that low number of items sampled in common decreases accuracy, and as thresholding is a well known technique for eliminating conditions that do not warrant consideration, it would have been obvious to those of ordinary skill in the art to modify the teachings Nordgren to include well known thresholding as suggested by Hey in order to increase accuracy of recommendations and to save processing time on user files that would obviously yield unacceptable results.

## Allowable Subject Matter

11. Claims 11-14 and 38 are allowable over the prior art of record.

## Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hayes whose telephone number is (571)272-6708. The examiner can normally be reached Monday through Friday from 5:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammell, can be reached on (571)272-6712.

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Hand delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

John W. Hayes Primary Examiner Art Unit 3621